

Status of the HIV/AIDS Epidemic in Michigan, 2002

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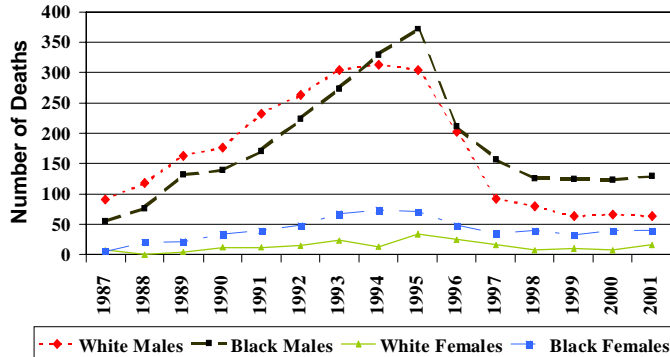
Global and National Overview

An estimated 5.0 million new HIV infections and 3.1 million AIDS deaths occurred during 2002, bringing the worldwide total persons infected with HIV to 42 million. There have been a cumulative total of 28 million deaths since the beginning of the epidemic. About three-quarters of new cases and deaths were in Sub-Saharan Africa, where transmission is predominately heterosexual (1).

In the United States the number of new infections remains at about 40,000 persons each year, while the number of deaths declined to about 15,600 in 2001. Through December 2001, 807,075 adult/adolescents had been reported as having AIDS; of these, 462,653 (57%) had died (2).

Michigan Deaths Remain Stable, But New HIV Diagnoses Remain High

HIV-Related Deaths in Michigan, 1987-2001



* 1999-2001 death data based on ICD-10 coding. Provisional comparability difference from ICD-9 codes is 6 percent

The number of HIV-related deaths declined one-fifth between 1997 and 2001 in Michigan. Deaths among white males declined 32%, black males declined 18%, white females did not change, and black females increased 11%. The number of HIV-related deaths declined significantly in 1996 and 1997, but decreased very little from 1998-2001. The decline in deaths is likely due to effective treatments that prolong life but do not eliminate HIV infection.

The number of persons newly diagnosed with HIV each year was roughly level between 1997 and 2001. These new diagnoses include persons who learn of their HIV infection status after developing symptoms of AIDS. Each year, there are more new diagnoses of HIV infection than deaths. Therefore, the reported number of persons living with HIV/AIDS in Michigan is increasing. MDCH estimates that 15,500 residents are living with HIV infection in Michigan.

Trends in New Diagnoses of HIV Infection in Michigan, 1997-2001

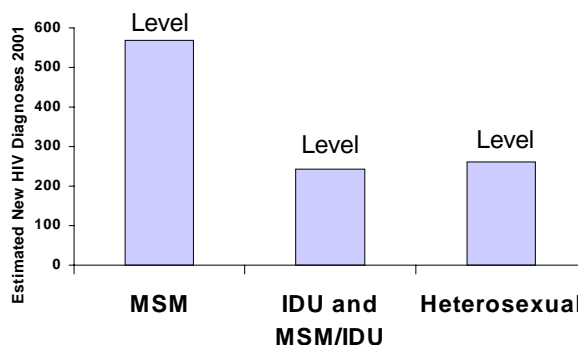
Methods: In order to evaluate trends over time, we estimated the number of persons newly diagnosed with HIV infection each year and determined if there was a statistically significant change between 1997 and 2001. Numbers were adjusted for people diagnosed in 1997-2001

who may not have been reported to the health department by July 1, 2002. The date of new HIV *diagnosis* does not tell us when persons were first *infected*, because their HIV diagnosis may take place months or years after infection. However, this is the best current measure of how fast the epidemic is spreading among different populations.

Overall: The total number of persons diagnosed with HIV was about 1,100 persons in 1997, declined to approximately 780 persons diagnosed in 1999, and then increased to approximately 1,100 diagnosed in 2001. The race, sex, risk and residence of persons with newly diagnosed HIV did not change significantly between 1997 and 2001.

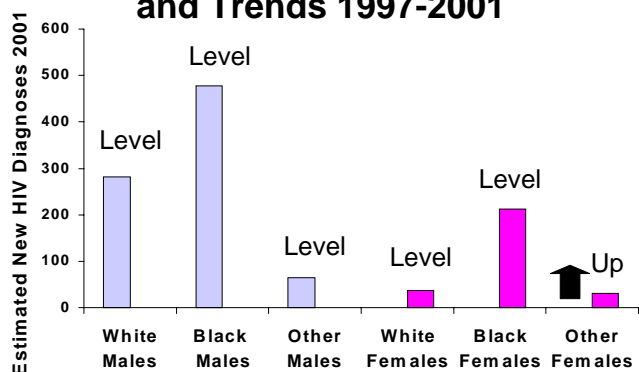
Risk Behavior for HIV Infection, 1997-2001: There were no significant changes in the proportion of new HIV infections in any of the risk behavior groups diagnosed each year between 1997 and 2001. In 2001, there were 569 (52%) diagnoses among MSM, 262 (24%) heterosexual diagnoses, 196 (18%) IDU diagnoses, 46 (4%) MSM/IDU diagnoses, and 29 (3%) other risk infections. Other risks would include transmission from blood products, perinatal exposures, and no identified risk. Less than 1 percent of diagnoses were among persons who first acquired infection from blood products received either before 1985 in the U.S. or in other countries. Approximately 1 percent of diagnoses were among infants born to HIV-infected mothers.

Number of New HIV Diagnoses in 2001, and Trends 1997-2001



Race and Sex 1997-2001: The proportion of persons diagnosed each year with HIV infection between 1997 and 2001 only changed

Number of New HIV Diagnoses in 2001, and Trends 1997-2001



significantly in non-white/non-black females - increasing from 16 to 30 cases. In 2001, there were 477 (43%) diagnoses in black males, 282 (26%) in white males, 212 (19%) in black females, 64 (6%) in non-white/non-black males, 37 (3%) in white females, and 30 (3%) in non-white/non-black females. Although the trend in new HIV infections among blacks is level, they are still impacted disproportionate to their numbers in the population. Black females and black males each make up 14 percent of the general population of Michigan but make up 58% of persons living with HIV

infection.

Residence 1997-2001: The number of new HIV diagnoses is unchanged across different geographic areas of Michigan. About two-thirds of new diagnoses each year are among residents of southeast Michigan (Wayne, Oakland, and Macomb counties). One third are diagnosed among residents of the rest of the state.

Concurrent HIV and AIDS Diagnosis, 1997-2001: The proportion of persons over this time period diagnosed with HIV infection and AIDS at the same time each year between 1997 and 2001 only changed significantly in black females – decreasing from 50 to 43 cases. In 2001, there were 121 such diagnoses in black males, 87 in white males, 43 in black females, 14 in non-white/non-black males, 6 in white females, and 6 in non-white/non-black females. From 1997 to 2001, the proportion of new HIV infections diagnosed at the same time as AIDS was 33% in white males, 27% in black males, 24% in black females, 23% in non-white/non-black males, 20% in white females, and 20% in non-white/non-black females.

Conclusions

HIV mortality has dropped markedly over the past five years while the number of new diagnoses of HIV infection did not change significantly. However, because there are still more new HIV diagnoses each year than deaths among HIV-infected persons, the total number of persons living with HIV infection is increasing.

Michigan residents with HIV infection continue to be predominately men who have sex with men and/or residents of Southeast Michigan. The proportion with heterosexually acquired infection is now slightly more than the number infected through injection drug use, although these two groups are closely intertwined. New diagnoses of HIV infection have increased significantly over the past few years among non-white/non-black females but did not change significantly for any other race, sex, or risk group.

Approximately 24 percent of new HIV infections are diagnosed at the same time as AIDS with men being diagnosed with HIV and AIDS concurrently more frequently than women. The proportion of new HIV infections diagnosed at the same time as AIDS decreased significantly in black females but did not change significantly in any other race/sex group.

References:

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